garden cuttings

a monthly newsletter for the discerning gardener

Vol. 1 : No. 1 October 1981

Our first issue

This first issue of *Garden Cuttings* is, in many respects, an experiment. We have endeavoured to bring together a number of fairly diverse pieces of news and information which we think will be of interest to the "discerning gardener" – using that word in its strict sense of "shrewd, discriminating". Because we believe the messages of the recent International Botanical Congress in Sydney to be so important we have given a good deal of space to conservation issues, and will make no apologies for returning to this theme again and again in future issues.

But a newsletter can only be as good as the news it contains. We believe that all sorts of things are happening all over the world that "discerning" gardeners will want to know about – new plants, new products, new ideas, new techniques. David Bellamy, in one of his lectures in Sydney last month, said he would like to return to Australia next year and do a sort of Michael Parkinson series of shows on television, in which he would drag the scientists out of their ivory towers and get them to talk about what they are doing. We would like to do the same, and perhaps we will. We would also like the fertilizer and chemical manufacturers, the plant breeders, the growers, the horticultural researchers, the tool makers, the landscape architects, in fact everybody who is involved in horticulture to tell us what they are doing, so that we, in turn, can tell everybody else who is interested. We would like to hear from Garden Clubs, from horticultural and specialist plant societies, about what they are doing. We would like to hear from publishing houses about any good books they are about to publish, and from individuals who have something interesting to tell us – about a rare or unusual plant they have been able to grow, a new hybrid or cultivar of their own, a new way of doing something. And, we would like to hear from nurseries who have rare or unusual plants to offer or for that matter anything of special interest.

From time to time we hope to produce "special issues" which we will make over to an expert in some particular field – perhaps native flora, orchids, flower photography, ferns, rainforest conservation, old roses, just to mention a few possible subjects.

Finally, if you have any comments, criticisms, and in particular any suggestions how we can make *Garden Cuttings* more interesting and more informative, *please* let us have them. We rely on your co-operation to make this a really worth while publication. And if you think it is worth while, would you like to pass it on to someone else who may be interested?

Our vanishing flora

Some three thousand botanists from the world over attended the XIIIth International Botanical Congress in Sydney in August – the first time this Congress has been held in the southern hemisphere.

One message in particular emerged from this Congress – a message which everyone, whether they be gardeners or not, should listen to – that if we don't stop destroying the world's vegetation at the rate we're doing it now we will meet disaster head on.

Professor Peter Raven, Director of the Missouri Botanic Gardens and Chairman of the U.S. National Research Council's International Committee on Rainforests, said that the world's rainforests were being destroyed or degraded at the rate of some 250,000 square kilometres every year, which means that by the year 2000 there just won't be any rainforests left. Against this background of destruction the population of tropical regions is increasing at an alarming rate, so that by the end of this century, it is likely that three people out of every five in the world will live in the tropics, leaving one in five to live in China and the remaining one in five to populate the rest of the world.

The destruction of the rainforests involves the extinction of plant and animal species that are vital to human survival. As Dr Lucas, Assistant Keeper of the Kew Herbarium, said, – it's the plants that keep the animals alive; we don't know how many plants with economic potential have yet to be discovered and we don't know what sort of genetic material we are going to need next in the constant battle for survival. As we force more and more plant species into extinction, how many potentially valuable plants and how much potentially vital genetic material are we losing – for ever? As Dr Lucas so aptly put it, "we must keep the cupboard full".

Other speakers told of what is happening in their countries. In Mexico most of the rainforests have been destroyed already. In India "slash and burn" agriculture has destroyed most of the rainforests of the Lower Himalayas, with disastrous results to the lower flood plains, while in Southern India the last remaining virgin rainforest is now under threat from a hydro-electric scheme. In South Africa some 38% of the native Proteacea as well as many other plants are threatened – more, strangely enough, by alien invasive plants than by any other cause. In Australia over 2200 species have been listed as being under threat, nearly half of them in Western Australia. Over the whole world there are something like a quarter of a million species of plants threatened with extinction, and without plants we cannot survive.

New horizons in pest control

A mere ten years ago one Norman Borlaug, known in the United States as "the father of the green revolution" described the opposition to chemical sprays as a "vicious hysterical propaganda campaign, promoted by fear-provoking irresponsibe environmentalists". Today few people would share this sentiment, and it is now generally agreed that many — but not all — chemical sprays are capable of threatening the natural environment, upsetting the balance of nature, and, in extreme cases, posing a threat to human health. Quite apart from these considerations it is now known that many insect pests are able to build up resistances to certain chemicals, so these are less effective than they were once thought to be.

Unfortunately, the non-chemical sprays, most of which are based on organic substances, are only partly successful against some pests and virtually useless against others. The most promising alternative to chemical pest control is "biological control" — a somewhat loose term used to describe several different avenues of attack. One of the earliest forms of biological control, and still widely used by commercial growers, is the use of predators, that is insects which themselves feed on a specific insect pest. For example there is a species of ladybird which feeds almost exclusively on mealy bugs. The difficulty with predators lies in the timing; as most have no other natural source of food than the pest they are being used against they can only survive if that pest is already present in sufficient numbers, and if they are introduced too late the damage will already have been done.

The newer forms of biological control aim at upsetting the life cycle of the pest. Pheromones are substances which the females of certain types of insect exude at mating time to attract the male. These pheromones can now be synthetized and used in one of two ways. Firstly, they are being used in traps with a special sort of glue that ensnares the over-eager male, and secondly they are being released into the air in abnormal concentrations; this, it is said, so confuses the poor male that he goes into a head-spin and kills himself! Other synthetic hormone-like substances are being used to block the metamorphosis of the insect from the larval to the adult stage, so that reproduction never takes place; artificially sterilized males are being released, so that the females lay only infertile eggs; and experiments are being conducted with the artificial introduction of virus diseases that are known to be specific to one particular group of insects.

In commercial orchards in the United Kingdom, the practice of what is now known as 'Integrated Pest Management', that is an integrated programme of chemical, biological and cultural methods, together with a careful monitoring of pest populations, has resulted in a reduction of up to 35% in the use of chemical pesticides; in the United States an even greater reduction is claimed.

So far as the home gardener is concerned much of this is still in the future, but probably the not too distant future. Our best biological weapon at the moment is *bacillus thuringiensis,* marketed under the name *Dipel* — this destroys leaf-eating caterpillars while being completely harmless to humans, domestic animals and other insects.

With or without these alternative methods, chemical pesticides have to be used carefully and responsibly, and not overused. Gardeners in New South Wales should look out for a booklet to be published by the N.S.W. Department of Agriculture this spring on the subject. The message of this booklet is loud and clear — LOOK ALIVE, IT'S ALL ON THE LABEL.

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Bouganvilleas in pots

With the introduction of many new, and more or less compact, Bougainvillea cultivars their use as pot plants is finding increased popularity. Some comments from a gardener in Barbados, who has a large number of bougainvilleas in pots — some of them have been in the same pots for eighteen years — may therefore be timely.

After flowering the plants are heavily pruned and shaped, to a height of no more than one metre. A fertilizer with a high potash content (in this case 12-12-17) is applied at the rate of about one tablespoonful to each 30 cm pot. The plants are watered twice a day (remember this is a tropical climate) for the next two weeks, during which growth is rapid, and foliar fertilizer is applied once a week. After two weeks of heavy watering, water is gradually reduced over the following three weeks to the point at which only sufficient is given to prevent wilting. At the end of six of seven weeks the plants will be in flower. Another application of 12-12-17 fertilizer is given, the foliar feeding is recommenced and so is the heavy watering regime. After two weeks normal watering is resumed but not the severe drying out period which is needed to initiate flower bud formation. The flowering period lasts for about six weeks, after which the whole cycle starts again. In this way, this Barbados gardener claims that her bougainvilleas have at least four peak flowering periods of six weeks each every year — twenty four weeks out of fifty-two!

New uses for new plants

Dr David Bellamy, the BBC TV "Botanic Man", also occasionally known as "the Pommie Botanist" – names which no doubt send shudders of disapproval down the spines of more conventional scientists – gave a fascinating and thought-provoking series of public lectures in Sydney during the course of the recent International Botanical Congress. He too stressed the dire necessity of conserving our unique native flora, but stressed that conservation doesn't mean simply leaving everything alone, but rather a more intelligent and rational use of what we have.

Much of our food production, for example, is extravagent in terms of the amount of energy used; much of the food we eat every day consumes five, six, even seven and more times as much energy in its production than it supplies to our bodies. This, of course, is acceptable as long as there is plenty of energy in the world to spare, but as many of our traditional energy sources start to run out, we may soon have to re-think some of our eating habits.

Fortunately for us, there are quite a few – possibly quite a large number – of plants that have virtually untapped potential. One of these that has attracted a certain amount of attention lately is the Jojoba (pronounced Ho-ho-ba), a plant from Central America that can grow in areas with minimal rainfall, can survive temperatures of minus 10 degrees celsius and salt winds. The beans it produces yield an oil that is said to be far superior to sperm whale oil, (an enormously expensive product in terms of energy), that is an excellent skin moisturiser, a sunscreen oil, an acne cure and a furniture polish. The American Indians also use it as a hair tonic! The plant grows to about four metres in height and about as broad. In appearance it looks something like a wattle, and could be a useful hedge or windbreak plant. Harvesting of the beans starts in about the fifth year after sowing seed.

Then there is the Winged Bean, *Psophacarpus tetragonolobus*. This plant is totally edible – leaves, seeds, flowers, shoots and tubers can all be eaten. The immature pods taste like green beans, while the seeds average 34% protein and 17% oil, comparable to soya beans. The tubers give 20% protein, which is ten times more than potatoes. A native of Papua and New Guinea and South-east Asia, where it grows mainly at high altitudes, it is said to have superior nitrogen-fixation abilities and needs no inoculation with nitrogen-fixing bacteria even when planted in poor soil. It has now been introduced into seventy different countries, and research is being carried out under the auspices of the International Council for the Development of Underutilized Plants, with a view mainly to raising strains with a greater climatic tolerance. This plant incidentally, should not be confused with the Asparagus Pea, which is *Lotus tetragonolobus*, an edible pea from southern Europe.

The Kalahari, or Marama Bean, grows in the sandy regions of Southern Africa, and rivals the soya bean and the peanut in its nutritional value; in fact it is one of the best food-energy sources among plants. It is a creeper that sends out several long stems as far as six metres. Its seeds, when roasted, have a rich nutty flavour similar to roasted cashews or almonds. It also produces a succulent tuber which may weigh up to 40kg and grow to a metre in diameter. When boiled or roasted these tubers are said to have a sweet flavour and to make a good vegetable dish. Yet the Marama Bean is still a wild plant – its cultivation has never been formally attempted.

The plant kingdom contains vast and as yet largely untapped energy resources. Photosynthesis itself is the most dynamic biological process that takes place on this earth, and it has been estimated that, if it were possible to harness all the energy it releases, the entire world, even using energy at the rate the United States does, would only use about one third of it in a year.

At the lower end of the energy scale, various plants can be used to produce fermented alcohols which can be used as "extenders" in petrol engines. Wastes from sorghum, cassava and sugar cane are being used in this way. The Barbassa Palm, which grows on land that has been degraded by intensive agriculture, has been described as the "chemical factory" par excellence – virtually every part of it can be fermented for energy use. The gopher plant, *Euphorbio lathyris*, which grows as a weed in semi-arid areas, can be turned into a form of crude oil, while the "Diesel Tree", or Copariba can yield 20-30 litres of "fuel" each year that can be used in diesel engines. The water hyacinth, that scourge of our rivers and lakes, is now being used in the production of bagasse, which is a kind of methanol.

Among the lower organisms, there is a species of algae called Danaliella, which can be farmed to make glycerol, a basic chemical extracted from oil, while prokaryoptic bacteria are capable of producing petrochemicals.

Chinese Spring Garden Tour

The Royal Horticultural Society of Victoria, in conjunction with Palanga Tours of Melbourne, is arranging a Spring Garden Tour of Eastern China. The tour will depart in April 1982 and its duration will be twenty-three days. It will be escorted by John Patrick, lecturer in Amenity Horticulture at Burnley Horticultural College. Numbers will be restricted so that the accompanying China Travel Service guides will have ample opportunity of showing the best in traditional gardens, agriculture and natural scenery.

The party will enter China from Hong Kong, and then travel to Guangzhou (Canton), a city with many garden restaurants that feature a complex system of courtyards and halls; then to Guilin (Kweilin), in a sub-tropical region with magnificent natural scenery, and on to Shanghai, China's most populous city. From there the party will go to Suzhou (Soochow) which has the most beautiful gardens in China, then to Wuxi (Wusih) on the banks of Lake Tai, Hangzhou (Hangchow), claimed to be China's most popular resort, and finally to the capital Beijing (Peking) Before returning to Australia the party will have two days in Hong Kong.

The cost of the tour is expected to be about $2,800. Further details may be obtained from Palanga Tours, 59 Queen Street, Melbourne, or from John Patrick at Burnley Horticultural College, Swan Street, Richmond, Victoria 3121.

Horizontal tomatoes

Growing tomatoes horizontally may sound revolutionary, but in fact it is quite an old technique. Transplants up to 60 cm in height can be used, and are laid down so that the lower two-thirds of each plant, with foliage removed, can be buried in a furrow 5 to 7 cm deep. The top end will straighten out overnight, while new roots will quickly form all along the buried length of stem. This larger root system is said to make the plants more vigorous and fruitful.

The Great Pyramid Appeal

Those who have visited the Pyramid Glasshouse at the Royal Botanic Gardens in Sydney must have been impressed by this striking glass and aluminium structure and the collection of tropical and sub-tropical plants within it — most especially, perhaps, by its superbly presented collection of bromeliads.

An imaginative scheme has been developed in which the existing pyramid will form one of a complex of three. These three will be linked by corridors meeting in a central foyer, which will house educational displays and aquatic plants. With three glasshouses it will be possible to display separately tropical Australian plants, tropical exotics and ferns and their allies. The gardens already have almost enough plants in reserve to be able to fill the two additional glasshouses that are proposed. This would bring many rare and beautiful plants into public display that have in the past been hidden due to lack of exhibition space.

It has been suggested that horticultural, environmental or similarly interested groups may like to run small fund-raising projects to assist with this scheme. Support is also sought from corporations, business houses and, not least, individuals.

To raise additional funds an Art Union is being run in conjunction with Apex, and prizes include visits to the pyramids of Egypt, Mexico and Thailand. Tickets are available at the existing glasshouse every weekend. Contributions can be paid to the Bent and Bligh Streets Sydney Branch of the Rural Bank (Great Pyramid Appeal — Account No. 89021300) or, alternatively, donations can be sent to, or Art Union tickets obtained from The Great Pyramid Appeal, Mrs Macquarie's Road, Sydney 2000 — telephone number (02) 27 4347.

Self-clinging climbers

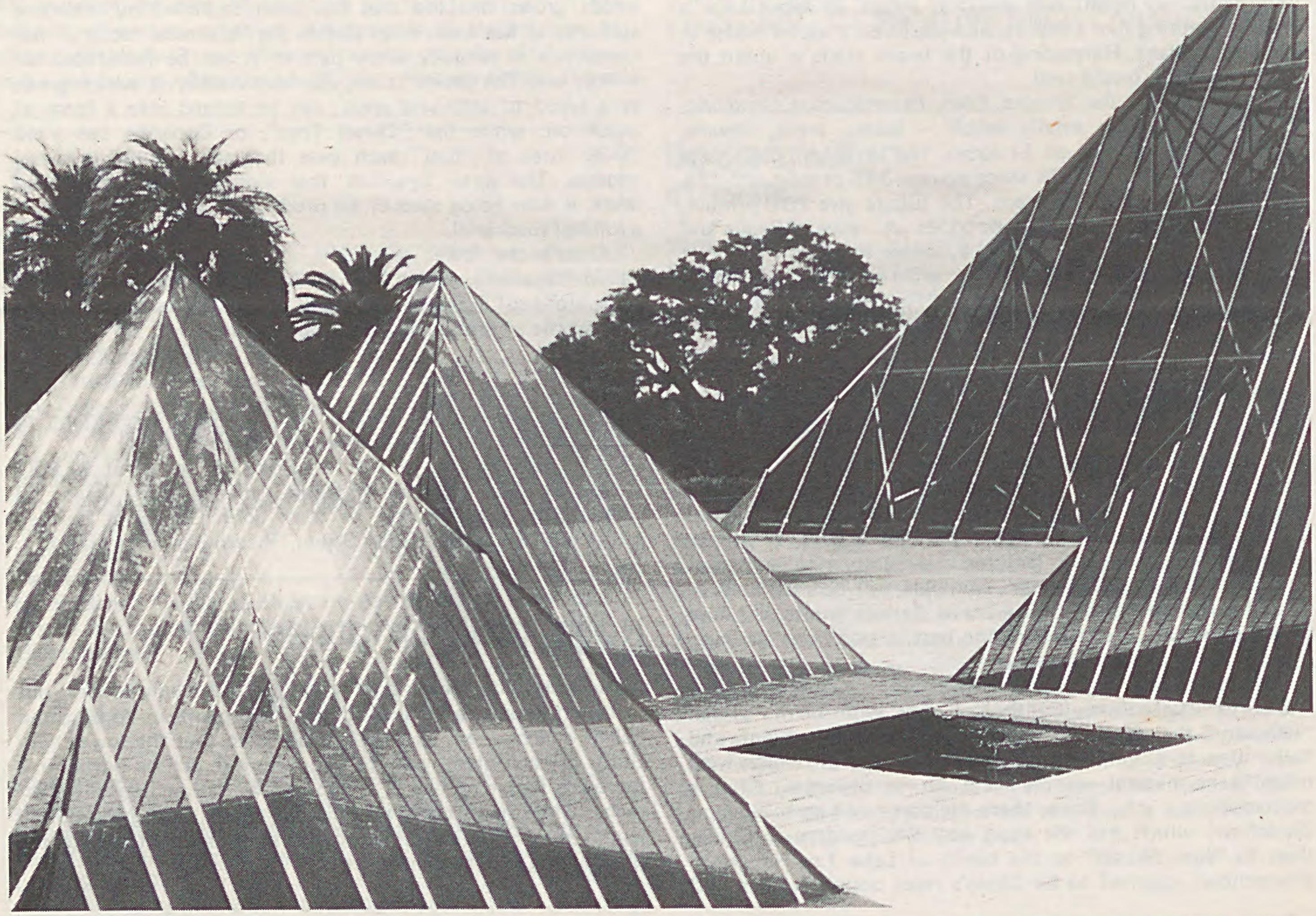
Climbing plants which don't need supporting but which fasten themselves to a wall, either by means of adventitious roots or sucker-like pads can be invaluable, but unfortunately there are not too many of them.

One of the showiest, and one that does particularly well in cool climates, preferabley on a south or sout-west facing wall, is a climbing hydrangea, *Hydrangea petiolaris*. It bears large corymbs of whitish flowers, many small fertile ones in the centre and fewer but much larger sterile ones on the outside. It will easily reach a height of eight or nine metres, but is normally deciduous. There is another climbing hydrangea, *H. integerrima*, which is evergreen, but the flower heads are not quite as large as those of *H. petiolaris*.

Very similar, and also self-clinging, is *Schizophragma hydrangeoides*. The two are often confused, but in Schizophragma the outer florets are somewhat larger. *S. integrifolia* is another self-clinging species even more showy than *S. hydrangeoides*, but rather less hardy.

Although popular in the Northern hemisphere these plants are seldom met with in this country. *Hydrangea petiolaris* and Schizophragma however, are both listed by Bert Chandler and Son Pty. Limited, Como Nurseries, cnr. Olinda and from Sheffield Road, The Basin, Victoria, 3154..

A model of the proposed complex of pyramids. Photo: Rudi Van Starrex



Garden history

Many fine examples of nineteenth century gardens have fallen into a state of decay; some have virtually disappeared, with only vestiges remaining; others are continually being threatened by modern development. These gardens are important, not only because of their historical significance and their intrinsic aesthetic merit, but because the plants which still struggle to grow in them — what we are now pleased to label "old-fashioned" plants, are themselves important. They are important because they represent a bank of invaluable genetic material which, once lost, could never be replaced.

Surveys of important historical gardens have now been carried out in each state, and recommendations formulated for the conservation of those which, it is felt, should be conserved.

The Australian Garden History Society, founded last year, has as its principal objectives the promotion of interest and research into historic gardens, encouraging the preservation of notable gardens, and facilitating discussion and the exchange of information between interested people and groups both in this country and overseas.

The Society published a Journal twice a year, in February and in August, a newsletter in May and November, and holds an Annual Conference and General Meeting. The next conference is scheduled to be held in Tasmania — where there are so many important gardens — in the Autumn of 1982. In addition state members are organizing various local meetings and inspections.

There are three categories of membership — individual ($10 per year), family ($15 per year), and corporate ($20 per year). Applications for membership should be sent to the Membership Secretary, Tasma Terrace, 4 Parliament Place, Melbourne, Victoria 3002.

Those who are interested in garden history on a world-wide level will also be interested in an international quarterly called, quite simply, The Journal of Garden History, the first issue of which was published at the beginning of this year. This Journal aims at presenting new material on specific gardens anywhere in the world, and "will explore the relevance of garden history to other topics, such as botany and horticulture, aesthetics, social and economic history, conservation, the history of ideas, and the relation of gardens to the history of landscape taste".

Further details can be obtained from the publishers, Taylor and Francis Ltd., 4 John Street, London WC 1 N 2ET.

A gardening course with style

English gardeners may have to put up with daunting weather conditions but there are, apparently, some compensations. An advertisement in *The Garden*, the official publication of the Royal Horticultural Society, announces a four day course on gardening and garden design to be held "in a pleasant country home a few miles south of Bath, where good food, drink and comfortable accommodation will complement and enhance the pleasures of a short stay spent learning more about how to plan and run a garden oneself". A maximum of eight people on each course "will ensure that individual needs and interests are fully provided for". The courses are organized by Peter Thompson, who was until recently the senior research botanist at Kew and a teacher on the Kew diploma course.

Would anyone in this country like to take up the challenge and start a similar course?

International Horticultural Congress

The XXIst International Horticultural Congress will be held in Hamburg from the 29 August, 1982, to the 4 September, 1982, and is open to all those with a serious interest in horticulture. It will focus on "Horticulture in the Industrial Society", to emphasize the various aspects of horticulture in the vicinity of areas with a high population density, the levels of production intensity, and the efforts made towards maintaining or creating a sound environment. It will also cover every aspect of progress in horticultural science, and those who attended the last International Congress, held in Sydney in 1978, will recall some of the extremely interesting papers that were presented there. In case some enthusiasts have doubts about attending a congress in Germany, we should mention that the proceedings will be conducted in English!

Special Interest Tours are being organized both before and after the Congress, and will include visits to the Amsterdam International Horticultural Exhibition (the "Floriades") and the Aalsmeer flower auction, as well as horticultural tours of the Rhineland, Westphalia, the Ruhr district, the Danish Islands, the Black Forest, South Tyrol, the Po Valley and Southern Italy.

Further details can be obtained from the XXIst International Horticultural Congress, Hamburg Messe und Congress GmbH, P.O. Box 30 23 60, D-2000 Hamburg 36, Federal Republic of Germany.

Peat-lite mixes

Soil-less composts have been in use for many years now, and their advantages over traditional composts will be known to all keen gardeners. Most of the earlier ones were based on what was called the U.C. (for University of California) formula, and in fact were various combinations of spagnum peat with sand of very definite specifications. The stringent details of the sand however, were sometimes ignored which led to problems with aeration and drainage. Another disadvantage of these early mixes was their relatively heavy weight; they were also designed to be steam-sterilized and placed on constant liquid feed — tasks not too easy for the home gardener.

A later development in this field is the Peat-lite mix, developed at Cornell University in New York State. Various combinations have been formulated, all of them containing between 40% and 50% by volume spagnum peat together with either vermiculite or perlite. While perlite contains virtually no plant nutrients vermiculite does contain appreciable amounts of both potash and magnesium in available forms.

Using vermiculite, a base fertilizer made up as follows has proved successful: — 2.5 kg fine limestone, 0.5 kg superphosphate, 0.5 kg calcium nitrate, 55 g. iron sequestrene, 85 g. trace element mixture, and 85 g. wetting agent. These quantities are for one cubic metre of compost. To this base fertilizer may be added a slow-release fertilizer such as Magamp or Osmocote.

These mixes do not have to be steam-sterilized, and should be mixed in the dry state. It has been found that, although they are light in weight when dry, when wet they are heavy and stable enough to make them suitable for use in quite small pots.

Willow water

Some years ago Professor Makota Kawase of the Ohio Agricultural Research and Development Centre discovered a very potent root-promoting compound in a willow extract. It appears that this is not a plant hormone, that when used alone it has an ability to stimulate rooting which surpasses any previously known rooting substance, and that this ability is even more marked when it is used in conjunction with a plant hormone. Professor Kawase theorizes that this substance may be rhizocalcine, a compound which is believed to translocate with indoleacetic acid to the base of cuttings to stimulate the formation of roots. Attempts are now being made to synthesize this compound, but gardeners who would like to experiment are recommended to steep willow cuttings (using any species) in water for forty-eight hours, then to place cuttings of any cultivated woody plant in the same water for twenty-four to forty-eight hours. The cuttings should then be dipped in a proprietary hormone rooting compound and planted straight away. Professor Kawase also believes that this "willow water" may stimulate the germination of seeds and the root development of transplants.

Soil-less turf

Anyone who has laid a new turf lawn will know that rolls of turf are heavy, dirty, and — because of their weight and bulk — expensive to have delivered. There is, however, another difficulty, that of "interface" which means a difference between the soil on the turf and the soil on which it is laid. Much cultivated turf is grown on relatively heavy soil, and when this is laid on top of a light sandy one capillary action may not be established, rain may stand on the surface, and rooting may be slow or may even fail altogether.

Some turf suppliers in the United States are now washing all the soil off their turf before delivery; apparently this soil-less turf, besides being less expensive and easier to handle, establishes itself very quickly. We wonder how long it will be before some enterprising grower in this country follows the example.

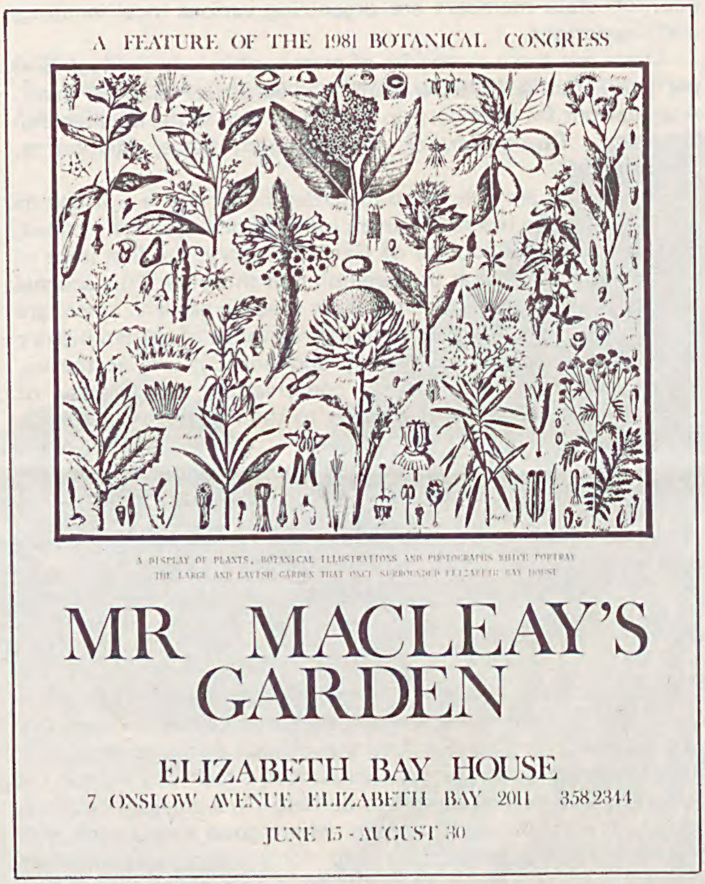
Mr Macleay's garden at Elizabeth Bay House

In 1826 Alexander Macleay, then Colonial Secretary of New South Wales, was granted fifty-four acres of land at Elizabeth Bay, close to Sydney. Immediately he set to work creating a garden, while work on the house was not commenced for another nine years. He spent a fortune on improving the site and importing plants from all over the world. Macleay was an ardent horticulturist; he had a long established connection with the Linnean Society in London and corresponded with plant collectors all over the world; in fact some plants appeared in his garden at Elizabeth Bay before they were introduced to and described at Kew Gardens. Fortunately he kept meticulous records of the plants he introduced so that now, although his garden has been completely eroded by sub-divisions, we have a fairly clear picture of what was in it.

The first plant to be entered in his list was *Glycine sinensis* (now known as *Wistaria sinensis*). He also introduced a number of exotic fruits, like *Dimocarpus litchi, Citrus nobilis* and *Citrus aurantium*, as well as bulbous plants from South Africa — Gladiolus, Watsonia, Ixia, Amaryllis, and Nerine. The garden was also planted with specimens of native flora brought back from expeditions by local plant collectors, including Sturt and Backhouse.

Sir Joseph Hooker, later to become Director of the Royal Botanic Gardens at Kew, England, visited Macleay at Elizabeth Bay in 1841 and described the garden as "a botanist's paradise". "My surprise was unbounded", he wrote, "at the natural beauties of the spot, the inimitable taste with which the grounds were laid out, and the number and rarity of the plants which were collected together."

Macleay's eldest son, William Sharp, acquired the house from his father in 1845, and further extended the plant collection, introducing such plants as *Ribes speciosum, Berberis buxifolia, Bilbergia iridifolia* and *Lippia (Lantana) montevidensis.*



A FEATURE OF THE 1981 BOTANICAL CONGRESS

A DISPLAY OF PLANTS, BOTANICAL ILLUSTRATIONS AND PHOTOGRAPHS WHICH PORTRAY THE LARGE AND LAVISH GARDEN THAT ONCE SURROUNDED ELIZABETH BAY HOUSE

MR MACLEAY'S GARDEN

ELIZABETH BAY HOUSE

7 ONSLOW AVENUE ELIZABETH BAY 2011 3582344

JUNE 15 - AUGUST 30

The garden, alas, has gone, but restoration of Elizabeth Bay House was commenced in 1972. It is now in the care of the Historic Houses Trust of New South Wales, which is continuing the work of furnishing and decorating it in a style authentic to Alexander Macleay's occupation. Jennifer Stackhouse, a Curatorial Assistant at the house, recently mounted a most interesting exhibition of "Mr Macleay's Garden", with original manuscripts, plans and photographs, as well as living specimens of many of the plants Macleay introduced.

ELIZABETH BAY HOUSE, 7 ONSLOW AVENUE, ELIZABETH BAY, 2011 is open to the public at the following times: Tuesday to Friday, 10am to 4pm, Saturdays 10am to 5pm, Sundays 12 noon to 5pm. Admission $1.00.

A new snail and slug killer

The problem with most forms of snail and slug bait has always been that domestic pets, and dogs in particular, are inclined to eat them, often with fatal results. In fact veterinary surgeons say this is by far the commonest cause of accidental poisoning in domestic pets.

Rentokil have recently developed, and now released, an entirely new type of snail and slug killer that cannot affect pets. It is based on metaldehyde, which has been used for years in conventional baits, but comes in the form of an aerosol; the metaldehyde is, in fact, suspended in water inside the aerosol can.

Called, appropriately enough, *Snail Shooter* it can be sprayed either on the plants or on the soil under the plants. The snails and slugs will be killed when they eat treated plants and when they absorb the material by crawling over treated surfaces. Tests carried out so far indicate that the best results are obtained by spraying the plants themselves, preferably a few sharp bursts from the aerosol every three days or so. As there is no long residual effect vegetables and other food crops can safely be eaten seven days after being sprayed; under normal weather conditions they will be resistant to attack from snails and slugs during that period.

As the material is water-based it will not cause leaf scorch. It is quick acting and often kills snails before they cause any damage; even if it does not kill them immediately tests have shown that they stop eating as soon as they absorb the material.

Rentokil *Snail Shooter* is now available through normal sources at about $2.50 to $3.00 per can.

Garden Gear

— some lawn care equipment

We intend making **Garden Gear** a permanent feature, in which, each month, we will review a small group of new or perhaps not so new garden tools or gadgets.

We start this month with four interesting and useful items of lawn care equipment. These are the brain children of Charles Smith, who is the National President of the Inventors Association of Australia, and who sits on the Federal Government's Inventors Advisory Committee. His firm, Better Methods, is now marketing these tools, not only all over Australia, but also to many overseas countries.

The first is the **Levelawn**, which is quite the best tool available for spreading top-dressing. It is wider than a normal rake but extremely easy to use. The several crossbars collect debris which a rake would leave on the surface, and because it spreads the top-dressing material very evenly far less material is needed than when using other applicators. Also it will not "scalp" the grass. The domestic model is 0.75 metres (30 inches) wide, and costs $17.00 (or $19.80 when fitted with a segmented handle for despatch by post), postage extra.

The second tool is the **Single Corer Catcher** for aerating lawns. It easily penetrates a dampened lawn at a rate of more than a hundred holes a minute without much effort, as no foot pressure is needed. The corings move upwards into the barrel which can be inverted to empty. Aerating a lawn allows oxygen to penetrate to the root area, as well as water and nutrients: it also facilitates drying out in wet weather. A garden fork does not do the job satisfactorily, as it forces soil to one side, thus adding to the compaction rather than alleviating it. This single corer catcher — which can be used for spot weeding as well as aeration — costs $19.80 plus postage.

The third tool is the **Turfdoctor**, an ingenious instrument for the accurate replacement of small areas of turf which have become worn or damaged. It causes the minimum disturbance of root structures, and any number of sods can be matched together perfectly, with no unpatched spaces between them. The patched areas also remain stable. The standard model is 15 cm square and costs $47.00, again plus postage.

The fourth tool is the **Turfbarber**, a hand-operated lawn edger which operates on a leverage principle. It cost $26.40 plus postage.

All these tools are fully guaranteed and are available from Better Methods, 274 Forest Road, Bexley, N.S.W. 2207 (P.O. Box 63 Bexley), telephone (02) 59 6831.

Grape baskets

Grapes in hanging baskets? Why not? At Michigan State University these have been produced by rooting three or four cuttings in a 25 cm plastic hanging basket in a peat-lite mix. In three months the plants had developed full foliage and several large fruit clusters. By frequent pruning the vines were kept compact and induced to fruit several times — four prunings produced a minimum of eight fruit clusters per basket. So far only the variety "Seyval" has proved successful in this way, but this is an interesting concept which some home gardeners may be tempted to experiment with.

garden cuttings

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